

Indiana Energy Systems Network Overview



February 5, 2008





IESN

Objectives

- Create a multi-partner coalition to
 - Build a vibrant, growing cluster of economic activity focused on the high margin, high wage segments of this rapidly evolving energy systems market opportunity
 - Leverage the extensive talent, industry, academic, and intellectual assets that reside in Indiana
 - Coordinate and integrate several different, but overlapping, energy systems related and talent creation initiatives
 - IESN would concentrate first on the region bound by the rough triangle encompassing Lafayette to Muncie to Indianapolis, and would reach out and leverage targeted assets elsewhere in the state





Strategy

- The IESN will foster an entrepreneurial environment and create the talent to support the development and launch of energy efficient solutions in existing and new Indiana-based firms.
- The Network will be a tangible demonstration of how Academia, Government, and Industry can be aligned to develop and rapidly deploy cutting-edge technologies to deliver real economic and environmental solutions





Initiatives

- The Energy Systems Network is envisioned to be an established enterprise, supported and funded by local, state, national, private, and public resources.
- •The Network will be an incubator for entrepreneurialism in existing and new firms, as it focuses on helping Indiana firms and workers capture a portion of the enormous growth potential in energy systems.





• Initiative 1: Entrepreneur in Residence

- Mr. John E. Waters has been identified and targeted as a leading candidate to serve as the Entrepreneur in Residence
- The Flagship Energy Systems Center will provide a base of operations for the Entrepreneur in Residence (EIR).





• Initiative 2: Network Diagnostic

- Assets Identify/aggregate existing reports of relevant assets/skills for Advanced Manufacturing, Hybrid Electric Vehicle, Advanced Propulsion, Distributed Power, Energy Storage, Energy Efficiency and Energy Security Technologies
- Gaps: Identify current and anticipated gaps in workforce availability and skills, supplier base, technologies, materials, facilities, business support services, economic development and policy support, etc.
- **Business Plan:** Building on extensive past work by the partner organizations and the diagnostic analysis, develop a detailed business plan, action agenda, and a funding strategy for long-term sustainability





• Initiative 3. Talent Development

• Define both the anticipated demand for and supply of the skilled workers to support the emergence of a world-class Energy Systems industry cluster. Identify skill requirements and develop/expand programs to retrain or up-skill existing workers and build talent pipelines for new workers with Indiana secondary and post-secondary education and training providers.





• Initiative 4: Network Launch

- Opportunity Identification: Initiate external opportunities to align with Indiana and regional assets. This would include extensive interviews and creation of formal advisory networks with large corporations and government agencies and labs pursuing energy efficient solutions in the transportation and distributed energy sectors.
- Proposals would be developed for leveraged integration and support of specific portions of the business plan. In particular, we would seek commitments from partners and Network participants to provide or help fund laboratory and testing resources





• Initiative 5: Revenue Generation/Business Creation

- Client Commitments: Establish grant and contractual commitments from corporate and military clients for Initiative participants to design, develop, test, and deliver advanced energy system solutions.
- Broker: Act as a trusted third party / intermediary to identify and broker partnerships among the identified companies.
- R&D Networks: Create groups of non-competing companies and educational institutions that work under Network guidance to create research and product development opportunities in areas of member strengths.
- Business Creation: Use those opportunities identified above and the business and entrepreneur network established to transform existing businesses and create new businesses to deliver on the opportunities.

• Initiative 6: Support supply chain development for this sector

The commercialization effort will require the identification and recruitment of talent, establishment of suppliers, integration of state-of-the-market products and technology, development of systems management tools and software for a commercial vehicle, building and testing prototypes, and creation of the tools and processes for manufacturing at scale.





IESN - fit with DAS

- Objectives and initiatives similar to DAS
- Technical focus aligns with the DAS Alternative Energy Focus Group



